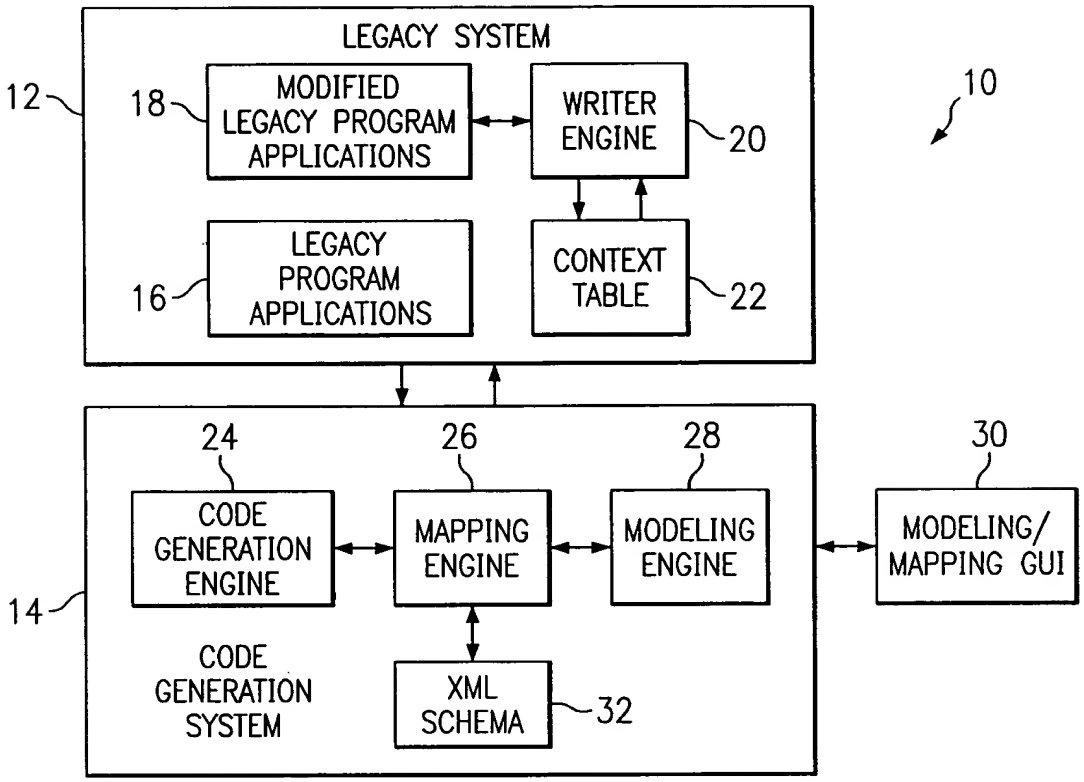


FIG. 1

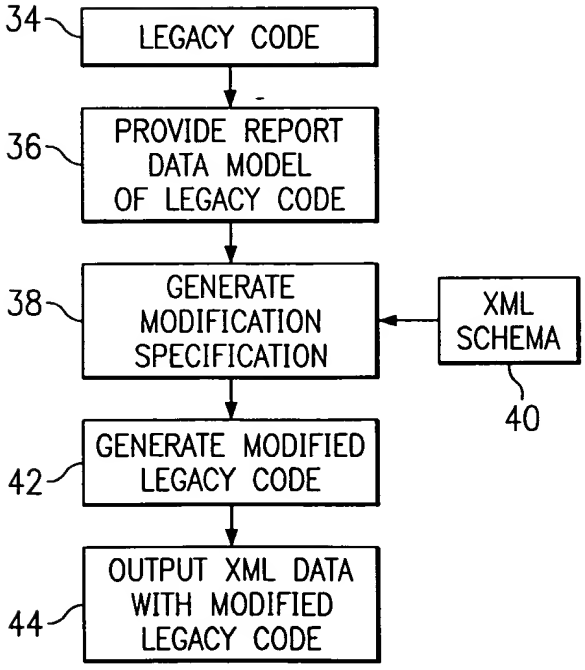


FIG. 2

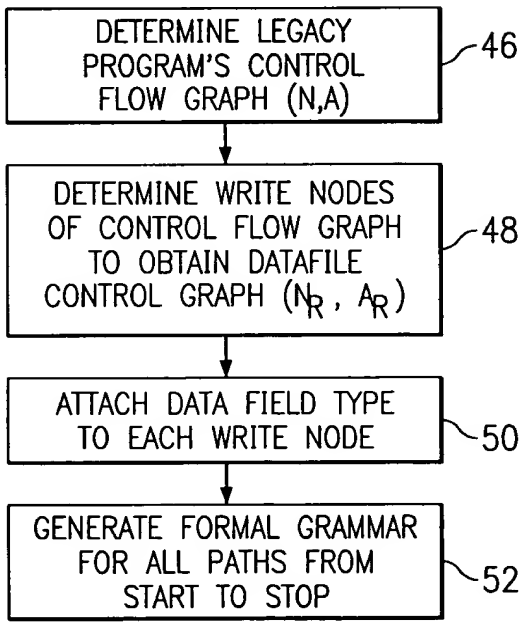


FIG. 3

Express Mail Label No. EL739956652US

Date 01/25/2000 American Telephone Company

Monthly Statement for Account Number: 1111111111
COMPANY: EDS

PHONE NUMBER: (214) 999-1212

PERSON: Suzie Q Sample-Data

Date	Time	Rate	Number	City and State		Duration	Cost
12/01/1999	07:15A	B	210-404-6690	San Antoni	TX	00:12.2	$1.22
12/02/1999	01:00A	A	210-404-6690	San Antoni	TX	00:01.0	$.05
12/02/1999	17:45P	D	919-416-1212	Kill Devil	NC	00:00.3	$.06
12/03/1999	15:01P	C	210-404-6690	San Antoni	TX	00:02.0	$.30
12/03/1999	20:23P	D	919-462-1212	Kill Devil	NC	03:02.3	$36.46
12/04/1999	06:06A	B	615-655-1122	Nashville	TN	00:00.5	$.05
12/07/1999	04:00A	A	210-404-6690	San Antoni	TX	01:00.0	$3.00
12/07/1999	15:05P	C	615-655-1122	Nashville	TN	00:40.5	$6.07
12/07/1999	15:45P	C	205-555-1234	Dothan	AL	00:04.3	$.64
12/11/1999	02:13A	A	615-655-1122	Nashville	TN	00:30.0	$1.50
12/11/1999	08:08A	B	210-404-6690	San Antoni	TX	02:20.5	$14.05
12/13/1999	08:00A	B	210-404-6690	San Antoni	TX	01:50.0	$11.00
12/21/1999	00:26A	A	210-404-6690	San Antoni	TX	00:31.3	$1.56
12/21/1999	04:12A	A	919-416-1212	Kill Devil	NC	00:32.0	$1.60
12/21/1999	18:23P	D	615-655-1122	Nashville	TN	00:23.3	$4.67
12/21/1999	19:01P	D	210-404-6690	San Antoni	TX	03:02.4	$36.48
12/22/1999	08:04A	B	205-555-1234	Dothan	AL	00:43.2	$4.32
12/27/1999	12:01A	C	205-555-1234	Dothan	AL	00:13.6	$2.04
12/27/1999	21:12P	D	205-555-1234	Dothan	AL	01:03.0	$12.60

TOTAL CALLS: 19 TOTAL TIME: 16:12:49 $137.67

FIG. 4

Express Mail Label No. EL739956652US

```
<bill>
  <account>1111111111</account>
  <customer-name>EDS</customer-name>
  <calling-date>1/billing-date26/2000></>
  <total-bill-by-phone>69.66</total-bill-by-phone>
  <total-time-by-phone>515.6</total-time-by-phone>
  <total-calls>34</total-calls>
  <detail-list>
    <detail-by-phone>
      <phone-number>999-1212</phone-number>
      <area-code>214</area-code>
      <phone-user>Suzie Q Sample-Data</phone-user>
      <calls-by-phone>
        <call>
          <date>12-01-1999</date>
          <time>07.15A/time>
          <code>B</code>
          <phone-number>404-6690</phone-number>
          <area-code>210</area-code>
          <called-city>San Antonio</called-city>
          <called-state>TX</called-state>
          <duration>12.2</duration>
          <charge>1.22</charge>
        </call>
        <call>
          <date>12-01-1999</date>
          <time>01.00A</time>
          <code>A</code>
          <phone-number>404-6690</phone-number>
          <area-code>210</area-code>
          <called-city>San Antonio</called-city>
          <called-state>TX</called-state>
          <duration>01.0</duration>
          <charge>0.05</charge>
        </call>
        <call>
          <date>12-01-1999</date>
          <time>17.45P</time>
          <code>D</code>
          <phone-number>416-1212</phone-number>
          <area-code>919</area-code>
          <called-city>Kill Devil</called-city>
          <called-state>NC</called-state>
          <duration>0.3</duration>
          <charge>0.06</charge>
        </call>
      </calls-by-phone>
      ...
    </detail-by-phone>
    ...
  </detail-list>
</bill>
```

FIG. 5

Express Mail No. EL739956652US

```
<Schema xmlns="urn: schemas-microsoft-com:xml-data"
  xmlns:dt="urn:schemas-microsoft-com:datatypes">
 <ElementType name="accountno" content="textonly"/>
 <ElementType name="customer-name" content="textonly"/>
 <ElementType name="billing-date" content="textonly"/>
 <ElementType name="total-cost" content="textonly"/>
 <ElementType name="total-number-calls" content="textonly"/>
 <ElementType name="total-time" content="textonly"/>
 <ElementType name="phone-number" content="textonly"/>
 <ElementType name="phone-user" content="textonly"/>
 <ElementType name="date" content="textonly"/>
 <ElementType name="charge" content="textonly"/>
 <ElementType name="called-city" content="textonly"/>
 <ElementType name="called-state" content="textonly"/>
 <ElementType name="duration" content="textonly"/>
 <ElementType name="code" content="textonly"/>
 <ElementType name="area-code" content="textonly"/>
 <ElementType name="time" content="textonly"/>
 <ElementType name="call">
   <element type="area-code" maxOccurs="1" />
   <element type="phone-number" maxOccurs="1" />
   <element type="code" maxOccurs="1" />
   <element type="date" maxOccurs="1" />
   <element type="time" maxOccurs="1" />
   <element type="duration" maxOccurs="1" />
   <element type="charge" maxOccurs="1" />
   <element type="called-city" maxOccurs="1" />
   <element type="called-state" maxOccurs="1" />
 </ElementType>
 <ElementType name="total-bill-by-phone" content="textonly"/>
 <ElementType name="total-time-by-phone" content="textonly"/>
 <ElementType name="total-calls-by-phone" content="textonly"/>
 <ElementType name="calls-by-phone">
   <ElementType name="call"/>
 </ElementType>
 <ElementType name="detail-by-phone">
   <element type="phone-number"/>
   <element type="area-code"/>
   <element type="phone-user"/>
   <element type="total-bill-by-phone"/>
   <element type="total-time-by-phone"/>
   <element type="total-calls-by-phone"/>
   <element type="calls-by-phone"/>
 </ElementType>
 <ElementType name="detail-list">
   <element type="detail-by-phone"/>
 </ElementType>
 <ElementType name="bill">
   <element type="accountno"/>
   <element type="customer-name"/>
   <element type="billing-date"/>
   <element type="total-cost"/>
   <element type="total-number-calls"/>
   <element type="total-time"/>
   <element type="detail-list"/>
 </ElementType>
</Schema>
```

FIG. 5A

EXPRESS MAIL NO. EL739956652US

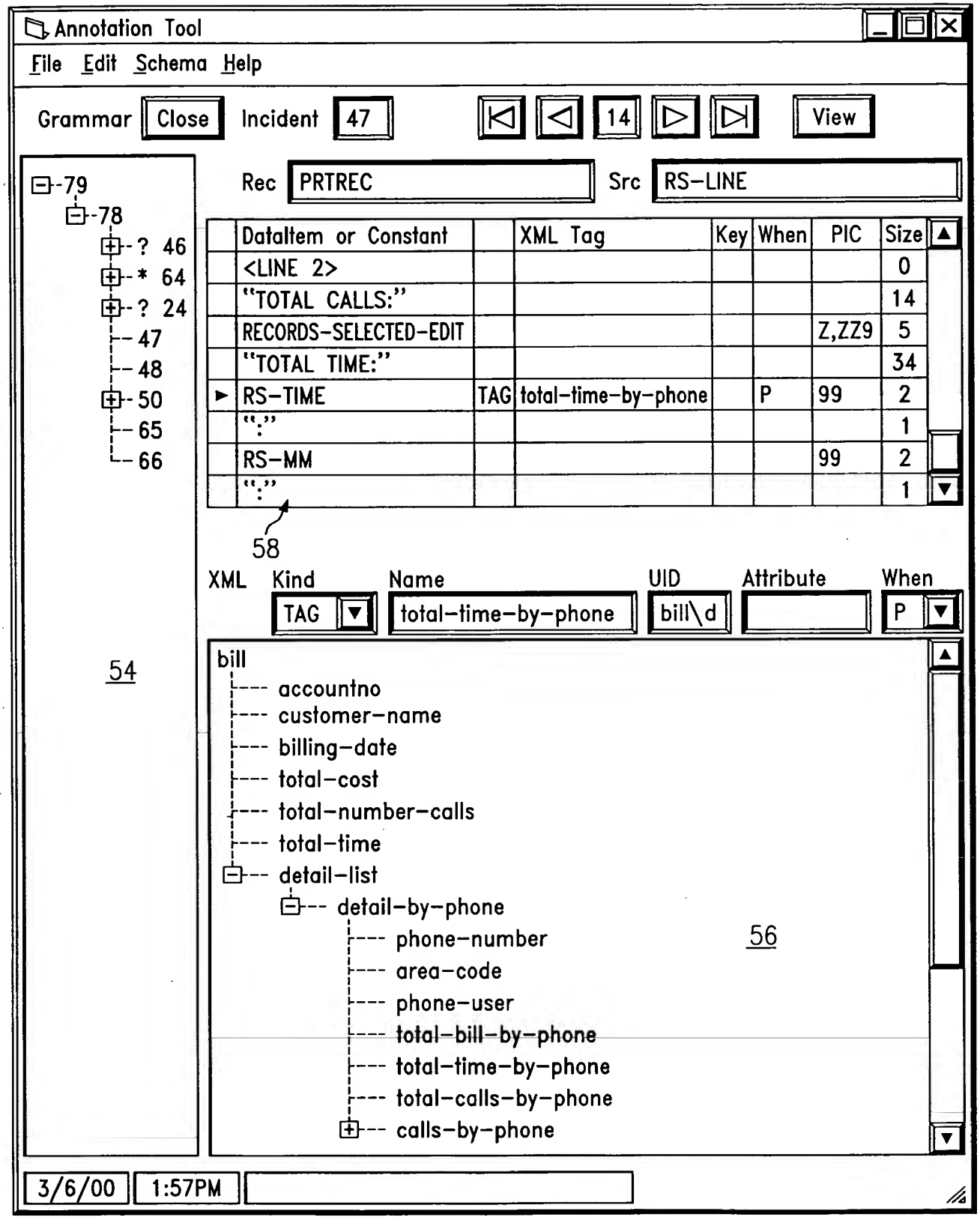


FIG. 6

TOE2470,"2/2/0460

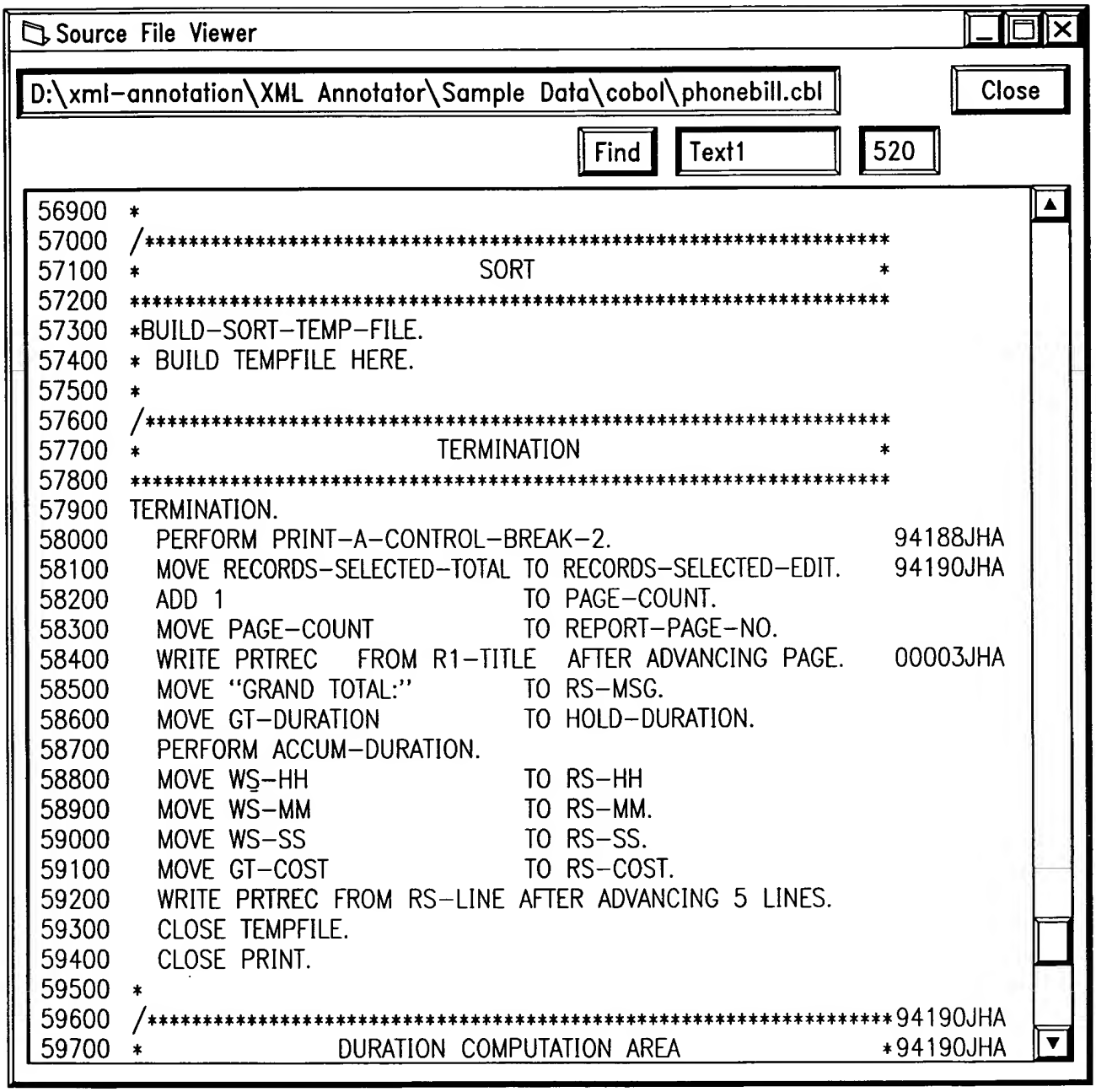


FIG. 6A

Express Mail No. EL739956652US

```
<Schema xmlns="urn:schemas-microsoft-com:xml-data"
    xmlns:dt="urn:schemas-microsoft-com:datatypes">
 <AttributeType name="Current" content="boolean"/>
 <ElementType name='Name" content="textonly"/>
 <ElementType name="ID" content="textonly"/>
 <ElementType name="Street" content="textonly"/>
 <ElementType name="City" content="textonly"/>
 <ElementType name="State" content="textonly"/>
 <ElementType name="ZIP" content="textonly"/>
 <ElementType name="Address">
    <Attribute type="Current"/>
    <Element type="Street"/>
    <Element type="City"/>
    <Element type="State"/>
    <Element type="ZIP"/>
 </ElementType>
 <ElementType name="Customer">
    <Element type="Name"/>
    <Element type="Address"/>
    <Element type="ID"/>
 </ElementType>
</Schema>
```

FIG. 7

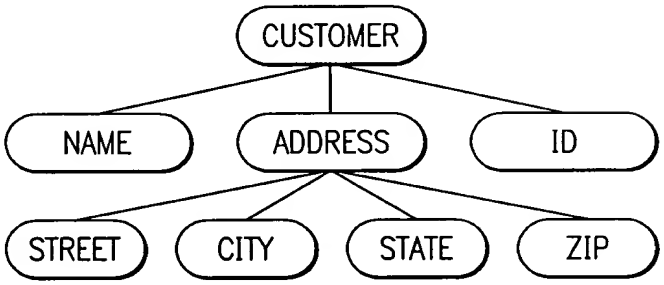


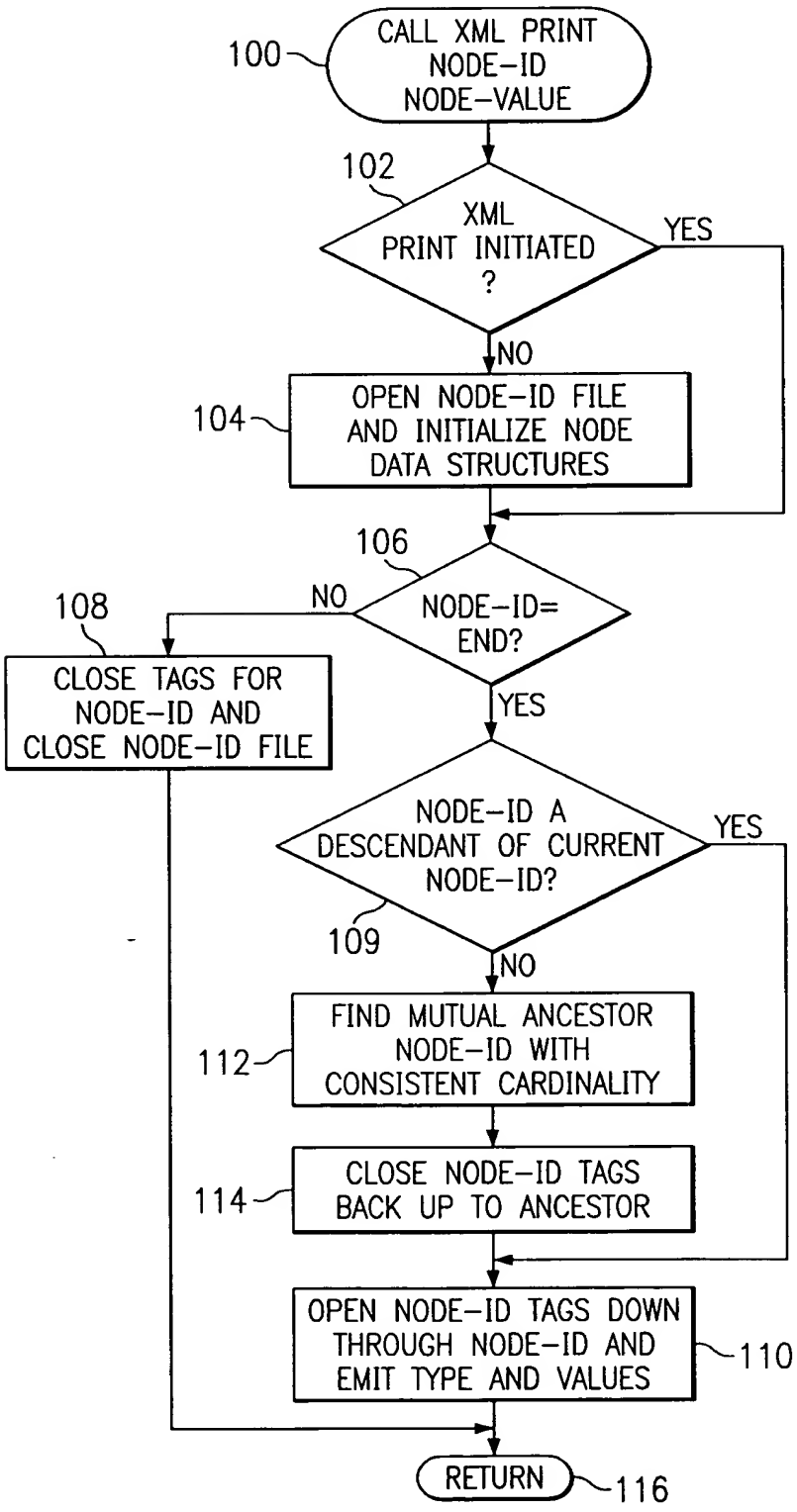
FIG. 7A

ID	LABEL	END LABEL	DEPTH	PARENT	CARDINALITY
1	<Customer>	</Customer>	1	0	n
2	<Name>	</Name>	2	1	1
3	<Address>	</Address>	2	1	1
4	<ID>	</ID>	2	1	1
5	<Street>	</Street>	3	3	1
6	<City>	</City>	3	3	1
7	<State>	</State>	3	3	1
8	<ZIP>	</ZIP>	3	3	1

FIG. 7B

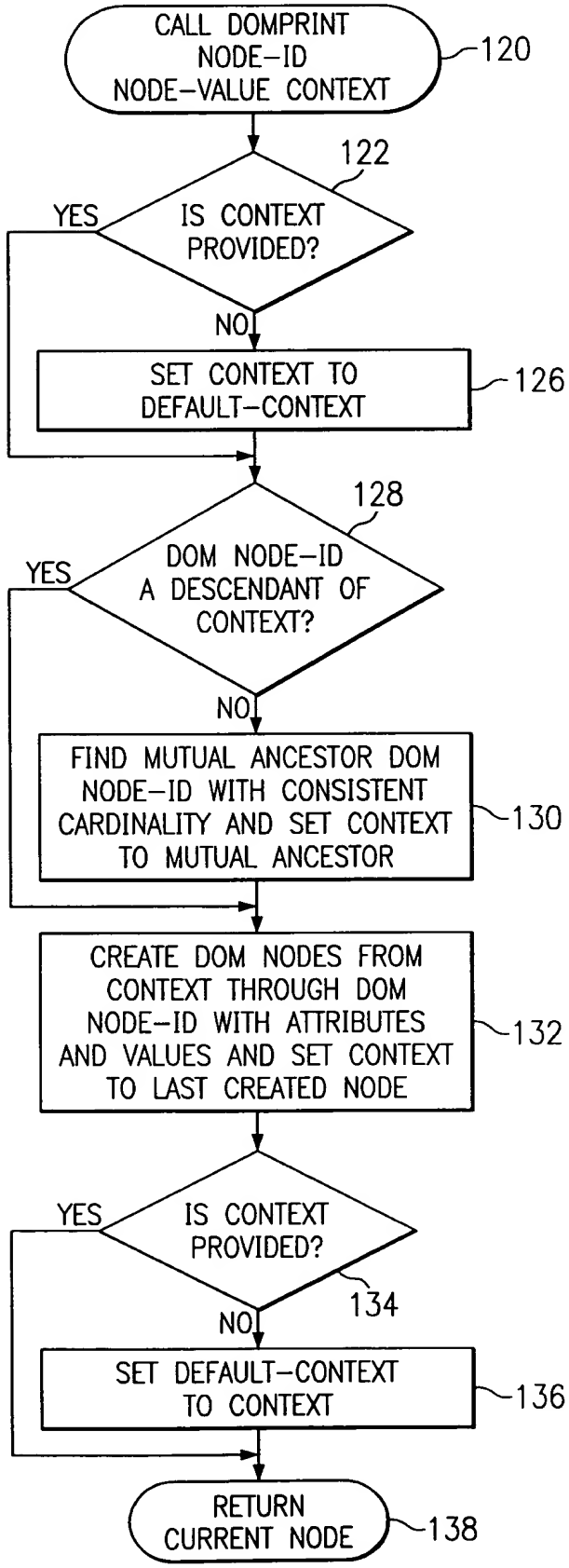
Patent: 7,249,314

FIG. 8



EXPRESS MAIL NO. EL739956652US

FIG. 9



EL739956652US